

ABSTRACT OF THE DISCLOSURE

A packaged micromirror assembly (10, 10', 10'', 110) is disclosed. The assembly (10, 10', 10'', 110) includes a mirror element (41) having a mirror surface (29) that can 5 rotate in two axes. Magnets (53) are attached to the mirror element (41), to permit rotation of the mirror surface (29). Coil drivers (36) are attached to a circuit board (38) or to a lead frame (65, 65'). A plastic body (30, 70) is formed around the coil drivers (36) to have an upper surface with an inner shelf (34, 74) to which the mirror element (41) is attached, and an outer shelf (32, 72) to which a transparent window (31) is attached. A 10 resistance heater (80) may be included within the body (30, 70) to prevent internal condensation in harsh environments. Alternative embodiments of the molded assembly (120, 150) include electrostatic plates (145, 146; 155, 156) that mate with widened gimbal portions (135, 136) of the mirror element (130) to electrostatically deflect the mirror surface (124). The disclosed packages (10, 10', 10'', 110) permit volume production of 15 micromirror assemblies as useful in a communications network.

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